

18.1988.Chicago Midwinter. CDS.88.Imperial Ballroom and Ogden Room

(part #2, on live 55 min, V GB)

A 00' Occlusion: presentation of the 2 **Gnathological and functionalist libraries** (freely chosen by the dentist) but also memory centered on the occlusal surfaces of theoretical teeth.

(From 02'00 to 06'00 min) **this is the first presentation of the Access Articulator** and especially, on slides, the explanation of occlusal movements. I explain the deformation of the occlusal surfaces modelled in our surfacic modeling software according to the cuspid contacts/grooves between the crown and the opposing teeth, but also the modifications of the lateral and central grooves modelled on the theoretical teeth according to the antero-posterior and lateral movements that will give us our new electronic Facial Arc.

(A 06'30 to 08'00 min) **this is the first, in the world, presentation of the first Facial Arc connected to a CAD modeling system called the "Access Articulator" (or AA)** proto and explanation of its operation to find these elements in order to modify the occlusal surfaces of theoretical teeth.

(A 09'00 min) **Machine tool presentations** (to save time, it has already machined the lower surface during the creation of the upper surface), its 7+2 tools, its 4 axes and its wear or fracture controls.

(A 12'00 min) **presentation of Aristée, the first heterogeneous composite structured 3D fibre in the history of dental materials** and which was designed in our laboratory and that of Spad as an artificial tooth with 3D-oriented fibers, loads fixed on fibres which are silica but which may also be hydroxy apatite and magma acrylic polyurethane. He reacts like a tooth.

(At 14'30 min) **presentation also of Dicor as ceramic** for CadCam with its makeup (slides of different teeth)

(From 17'00 to 30'00 min) during machining the menu is presented which allows to customize the shape of the tooth (and theoretical teeth in memory **thus creating its own library**). A prosthetist can thus deform as he wants the tooth that is proposed to him in the automatic environment: we use the knots, we can go back, we modify the bulges, the general degree of wear and this by having the tool zoom and without resorting to the keyboard.

(At 37'00 min) before the end of the machining, the main issue is the price of the unit, a crown and the training time. The price of the unit is the same as the traditional method for 6 crowns a day in a cabinet and 10 in a laboratory. The training takes about 2 ½ days (was too optimistic even if we had a training center)

(At 43'00 min) I announce that I will present a new invention for makeup (see list of patents 1988) In Chicago this makeup will be made in a brilliant way (as usual!) in 4 minutes by Bernard Duret (46'00 to 49'00 min).

(49'00 to 55'00 min) **verification of the finishing line** before and after sealing: it is perfect!